HD2080T

HF Compression Driver

Key Features

- 109 dB SPL 1W / 1m average sensitivity
- 2 inch exit throat
- 3 inch edgewound aluminum voice coil
- 200W program power handling
- Polyethylene - Titanium diaphragm assembly
- Copper shorting ring on pole pieces

Description

The HD2080T 2-inch exit high frequency compression driver has been designed for use in high quality installed audio systems, where weight is not the key issue. The motor structure, throughout the precisely coherent phase plug with 3 circumferential slots and copper ring on the pole piece, reduces inductance effects and distortion. Four top plate air ducts have been designed to act as a loading chamber for the diaphragm, implementing mid band distortion and response figures. The HD2080T diaphragm assembly is composed of a titanium dome sandwiched to a proprietary treated polyester suspension unit. It has been designed to maintain low resonance, lowering the minimum crossover point value at 1.2kHz. Thanks to its physical properties, the proprietary treated Nomex former has a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. This feature enables proper energy transfer control from the voice coil to the dome in real working conditions. Moreover, this proprietary former material is also suitable for use in higher moisture content environments. The HD2080T powerful ceramic magnet assembly has been designed to obtain 16KGauss in the gap. Excellent heat dissipation and thermal exchange are guaranteed by the direct contact between the magnetic structure and the aluminum cover which leads to a lower power compression value.

Models

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<th>Model</th>
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<td>0423A8H610</td>
<td>0423A8H610</td>
<td>8Ohm</td>
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**General Specifications**

- **Throat Diameter**: 50 mm (2 in)
- **Rated Impedance**: 8 Ohm
- **DC Resistance**: 6.2 Ohm
- **Minimum Impedance**: 8 Ohm at 3500Hz
- **AES Power**: 100W above 1.2 kHz
- **Program Power**: 200W above 1.2 kHz
- **Sensitivity**: 109 dB
- **Frequency Range**: 500Hz ÷ 20kHz
- **Recomm. Xover Frequency**: above 800Hz (12dB/oct slope)
- **Diaphragm Material**: Titanium - Polyethilene
- **Voice Coil Diameter**: 75 mm (3 in)
- **Voice Coil Winding Material**: Edge-wound aluminum
- **Magnet Material**: Ferrite
- **Flux Density**: 1.8 T
- **BL Factor**: 12.8 N/A
- **Polarity**: Positive voltage on + terminal gives positive pressure in the throat

**Mounting information**

- **Overall diameter**: 169 mm (6.65 in)
- **N. of mounting holes and bolt**: 4 M6 holes 90° at Ø 102 mm (4 in)
- **Bolt circle diameter**: 102 mm (4 in)
- **Total depth**: 75.4 mm (3 in)
- **Net weight**: 5.3 Kg (11.60 lb)
- **Shipping weight**: 5.5 Kg (12.10 lb)
- **Cardboard Packaging dimensions**: 170x170x80 mm (6.7x6.7x3.2 in)

**Notes**

1) AES power rating is tested with a pink noise input having a 6 dB crest factor for two hours duration within the specified frequency range, calculated on minimum impedance.
2) Program power rating is defined as 3 dB greater than AES rating, and is a conservative expression of the transducer ability to handle music program material.
3) Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of XR2064 horn, averaged between 1kHz and 4kHz.